



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

EXPEDITED PROCEDURE UNDER 37 C.F.R. §1.116

Ji Eun LEE et al.

Confirmation No.: 2659

Serial No.: 09/964,533

Group Art Unit: 2621

Filed: 9/28/2001

Examiner: Jamie J. VENT

Customer No.: 34610

For: INTELLIGENT VIDEO SYSTEM

## REQUEST FOR RECONSIDERATION

U.S. Patent and Trademark Office Customer Service Window, Mail Stop AF Randolph Building 401 Dulany Street Alexandria, VA 22314

Sir:

Claims 1-8 and 10-31 are pending in this application. Applicants respectfully request withdrawal of the outstanding rejections set forth in the Office Action dated February 26, 2007.

The Office Action rejects claims 1-8, 10, 12-25, and 28-31 under 35 US.C. §102(b) over U.S. Patent 5,615,018 to Wu et al. (hereafter Wu) in view of U.S. Patent 5,377,051 to Lane et al (hereafter Lane). The Office Action also rejects claims 11, 26 and 27 under 35 U.S.C. §103(a) over Wu in view of Lane and in further view of U.S. Patent 6,400,996 to Hoffberg. The rejections are respectfully traversed.

Applicants respectfully assert that the outstanding rejections should not be final because a new reference is now being applied to reject the claims even though the subject matter was

previously claimed. That is, the Office Action dated September 21, 2006 rejected claims 1-10, 12-25 and 28-31 under 35 U.S.C. §102(b) based on Wu. In response, applicants filed an amendment amending independent claim 1 to include the features of dependent claim 9, which at the time was rejected based only on Wu. Applicants argued that the features of dependent claim 9 in independent claim 1 were not taught by Wu. In response, the final Office Action now applies a new reference, namely Lane, to reject the subject matter of independent claim 1 (which includes the features of previous dependent claim 9). Lane was not applied during the first Office Action. See MPEP §706.07(c) relating to when a second action should not be made final. Applicants respectfully submit that the finality of the outstanding Office Action should be withdrawn at least for this reason.

Independent claim 1 recites calculating complexity of a video story development based on motion information by sequentially indexing an entire video, determining a play speed using the calculated motion-based complexity, and variably controlling the play speed of the video based on the determined play speed. Independent claim 1 also recites that the complexity is defined based on additional information on a length of shot segment, wherein the complexity is defined as simple in a case that a length of a shot segment is long and the complexity is defined as more complicated in a case that shots having short shot segments consecutively appear.

The Office Action states that Wu does not disclose that complexity is defined based on additional information on a length of a shot segment, wherein the complexity is defined as simple in a case that a length of a shot segment is long and the complexity is defined as more

complicated in a case that shots having short shot segments consecutively appear. The Office Action (on page 3) then cites Lane's FIG. 12d for the missing features. However, Lane does not

teach or suggest that the complexity is defined as simple in a case that a length of a shot segment

is long and the complexity is defined as more complicated in a case that shots having short shot

segments consecutively appear. Lane also does not disclose shot segments. The applied

references therefore do not teach or suggest all the claimed features.

The Office Action relies on Lane for the claimed features relating to defining the complexity. Lane also does not suggest the "base features" of the claimed complexity. That is, Lane does not teach or suggest calculating complexity based on motion information by sequentially indexing an entire video, as recited in independent claim 1 (and similarly independent claim 25). In view of this, Lane does not teach or suggest the respective claimed calculating the complexity where the complexity is defined based on certain features. Rather, Lane teaches complexities relating to such requirements such as separate encoding, decoding and storage of D-frames that adds to the cost and complexity of a VTR which uses D-frames for fast play modes of operation. See Lane's col. 14, line 67-col. 15, line 17. Accordingly, Lane does not relate to the claimed complexity calculation.

Still further, the Office Action (on page 3) states that information based on a length of a shot allows for a more accurate motion compensation. However, this does not suggest the features of the present claims as well as the advantages discussed in the present specification.

For at the reasons set forth above, the applied references do not teach or suggest all the features of independent claim 1. Thus, independent claim 1 defines patentable subject matter.

Independent claim 23 recites a method of constructing index information for controlling an intelligent fast-forward viewing includes constituting the content complexity as index information defined as a predetermined form enabling to designate each play speed of the corresponding content complexity, wherein the content complexity is defined based on additional information on a length of shot segment, wherein the content complexity is defined as simple in a case that a length of a shot segment is long and the content complexity is defined as more complicated in a case that shots having short shot segments consecutively appear.

For at least similar reasons as set forth above, the applied references do not teach or suggest at least these features of independent claim 23. Thus, independent claim 23 defines patentable subject matter.

Independent claim 25 recites a means for calculating a complexity of video content in accordance with story development of a corresponding video from a digital video stream including at least motion information, a means for storing the calculated content complexity; and a means for playing and displaying the corresponding video in different play speeds for each specific interval on the basis of the stored content complexity. Independent claim 25 also recites that the content complexity is defined based on additional information on a length of shot segment, wherein the content complexity is defined as simple in a case that a length of a shot

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segment is long and the content complexity is defined as more complicated in a case that shots

having short shot segments consecutively appear.

For at least similar reasons as set forth above, the applied references do not teach or

suggest at least these features of independent claim 25. Thus, independent claim 25 defines

patentable subject matter.

In view of the foregoing, it is respectfully submitted that the application is in condition

for allowance. Favorable consideration and prompt allowance of claims 1-8, 10, 12-25, and 28-

31 are earnestly solicited. If the Examiner believes that any additional changes would place the

application in better condition for allowance, the Examiner is invited to contact the undersigned

attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this,

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and

please credit any excess fees to such deposit account.

Respectfully submitted,

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